## **ABSTRACT**

A heater system may include an alternating current supply and an electrical conductor. Alternating current may be applied to one or more electrical conductors at a frequency between about 100 Hz and about 1000 Hz. The electrical conductors may be located in a formation. The electrical conductors may resistively heat upon application of the alternating electrical current. At least one of the electrical conductors may include an electrically resistive ferromagnetic material. The electrical conductor may provide a reduced amount of heat above or near a selected temperature. Heat may transfer from the electrical conductor to a part of formation.

5

10